of the user-input elements are in the active condition upon perceiving a visual indication (e.g., extended orientation) therefrom. Even further, user-initiated actuation of the user-input elements in the active condition provides a tactile feedback that substantially imitates a click generated by keys of a standard keyboard.

Acronyms and Shorthand Notations

[0022] Throughout the description, several acronyms and shorthand notations are used to aid the understanding of certain concepts pertaining to the associated system and services. These acronyms and shorthand notations are solely intended for the purpose of providing an easy methodology of communicating the ideas expressed herein and are in no way meant to limit the scope of the present invention. The following is a list of these acronyms:

JAD	Java Application Descriptor
JAR	Java Archive
PDA	Personal Digital Assistant
XML	Extensible Markup Language

[0023] Further, various technical terms are used throughout this description. A definition of such terms can be found in *Newtons Telecom Dictionary* by H. Newton, 22nd Edition (2006). These definitions are intended to provide a clearer understanding of the ideas disclosed herein but are not intended to limit the scope of the present invention. The definitions and terms should be interpreted broadly and liberally to the extent allowed the meaning of the words offered in the above-cited reference.

[0024] As one skilled in the art will appreciate that embodiments may be embodied as, among other things, a computer-program product. Accordingly, the embodiments may take the form of a hardware embodiment, a software embodiment, or an embodiment combining software and hardware. In one embodiment, the present invention takes the form of a computer-program product that includes computer-useable instructions embodied on one or more computer-readable media.

[0025] Computer-readable media include both volatile and nonvolatile media, removable and nonremovable media, and contemplates media readable by a database, a switch, and various other network devices. By way of example, computer-readable media comprise media implemented in any method or technology for storing information. Examples of stored information include computer-useable instructions, data structures, program modules, and other data representations. Media examples include information-delivery media, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile discs (DVD), holographic media or other optical disc storage, magnetic cassettes, magnetic tape, magnetic disk storage, and other magnetic storage devices. These technologies can store data momentarily, temporarily, or permanently.

[0026] Computer readable media, computerized methods, and touchscreen devices are provided for manipulating a portion of user-input elements. In exemplary embodiments, "user-input elements" are components accommodated by the touchscreen device that are configured to receive inputs from a user. In one embodiment, the user-input elements are moveable pins that are adjusted between a retracted orientation and an extended orientation by an electromechanical device. The method of adjustment may be by mechanical techniques, magnetic forces, or any other suitable method for physically positioning components which is well known in the relevant industry, as will be discussed more fully below. When in the retracted orientation, the user-input elements typically form a solid hard surface. Alternatively, when adjusted to the extended orientation, the user-input elements typically act as touch-sensitive keys that provide a tactile feedback upon actuation. Additionally, upon actuation, the user-input elements are adapted to receive an input (e.g., key event) that is consequently conveyed to a presently-running application on the touchscreen device. In one instance, the "key event" triggers a particular command associated with the presently-running application according to the configuration setting of the selected user-input elements. Accordingly, the function that each user-input element (e.g., key) initiates is updatable and may be defined by the presently-running application.

[0027] Although discussed above as moveable between an extended and a retracted orientation, it should be understood and appreciated by those of ordinary skill in the art that other orientations of the user-input elements could be provided for and achieved by the electromechanical device (e.g., partially extended orientation), and that the invention is not limited to those release mechanisms shown and described. Further, although described as adaptable to facilitate functions that control the presently-running application, the user-input elements, via sensing elements coupled thereto, may be multi-functional and/or may control other aspects of functionality related to the touchscreen device beyond the presently-running application.

[0028] Generally, the user-input elements are manipulated based on requests received at a processing unit of the touchscreen device. These requests may be received from a user, a presently-running application (e.g., locally-performing program, application on a remote server that is communicatively coupled to the touchscreen device), or any other program residing on the touchscreen device. The use of "requests" is not intended to be limited to commands directed only toward user-input elements, but to any signal that affects computing functionality and output expressed by the touchscreen device. For instance, requests may include information related to presentation data and/or configuration settings.

[0029] The presentation data is display-based information generally conveyed from a processing unit (e.g., processing unit **205** of FIG. **2**) to a flexible touchpad, via a data transmission connection, for directing which content is presented at a user interface (UI) display rendered on the flexible touchscreen. In one instance, the content may be alphanumeric characters associated with the outwardly-extending protrusions expressed on the flexible touchpad (see FIGS. **5-7**). In other instances, the content may be video media that is presented in cooperation with the outwardly-extending protrusions (see FIGS. **8** and **9**), or independently thereof.

[0030] The configuration settings are information related to configuration of a physically-extending keypad, or other pattern generated by the outwardly-extending protrusions, that is generally conveyed from the processing unit to an electromechanical device, via a data transmission connection, for directing which of user-input elements are to be manipulated to contact and deform the flexible touchscreen. In an exemplary embodiment, the configuration settings are derived from a predefined configuration retrieved by the processing unit in response to the request. By way of example only, the